

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A network interface device comprising:
  - an isolation device adapted to isolate a transport medium internal to a customer premises from a transport medium external to the customer premises such that operational changes to one of the internal and external transport media do not affect the other of the internal and external transport media;
  - a first interface coupled with the isolation device and adapted to communicate with the external transport medium, wherein the external transport medium is in communication with a distribution point;
  - a second interface coupled with the isolation device and adapted to communicate with the internal transport medium; and
  - a plurality of microservers ~~microserver~~ disposed external to the customer premises and coupled with the first and second interfaces, wherein the plurality of microservers ~~are microserver~~ is adapted to receive telecommunication information from the external transport medium and includes software and hardware for implementing at least one of an authentication microserver, a file-transfer microserver, a dynamic host configuration protocol microserver, or webserver microserver to function over the internal transport medium by processing the received telecommunication information, wherein the plurality of microservers are plug-and-play combatable such that any of the plurality of microservers are configured to be able to be added and/or removed from the network interface device at any time and without configuration, and wherein the plurality of microservers are integrated in the network interface device;
- wherein the isolation device is further adapted to provide communications security by preventing a microserver from accessing communications information which is associated with another microserver.

2. (Currently Amended) The network interface device recited in claim 1 wherein the isolation device and the plurality of microservers ~~microserver~~ are disposed within a common housing.

3. (Original) The network interface device recited in claim 2 wherein the common housing is disposed on an exterior wall of the customer premises.

4. (Currently Amended) The network interface device recited in claim 1 further comprising an addressable application device coupled with the plurality of microservers ~~microserver~~, wherein the addressable application device is adapted to receive the processed telecommunication information and to execute a defined application as an aid to implementing the ~~microserver~~ functions over the internal transport medium.

5. (Original) The network interface device recited in claim 4 wherein the addressable application device is disposed external to the customer premises.

6. (Currently Amended) The network interface device recited in claim 5 wherein the isolation device, plurality of microservers ~~microserver~~, and addressable application device are disposed within a common housing.

7. (Previously Presented) The network interface device recited in claim 1 wherein the authentication microserver is adapted to verify that the microserver functions are authorized for the customer premises.

8. (Previously Presented) The network interface device recited in claim 1 wherein the file-transfer microserver is adapted to transfer an electronic file of information to or from the network interface device.

9. (Previously Presented) The network interface device recited in claim 1 wherein the dynamic host configuration protocol microserver is adapted to manage an internet-protocol address assignment to a device coupled with the internal transport medium.

10. (Original) The network interface device recited in claim 9 wherein the internet-protocol address assignment comprises a public internet-protocol address assignment.

11. (Original) The network interface device recited in claim 9 wherein the internet-protocol address assignment comprises a private internet-protocol address assignment.

12. (Currently Amended) The network interface device recited in claim 1 wherein the plurality of microservers comprise ~~microserver comprises~~ a code-processing microserver adapted to receive code and process the code for use by another component of the network interface device.

13. (Previously Presented) The network interface device recited in claim 12 wherein the webserver microserver is adapted to render a display of incoming web-page information suitable for presentation with a web-browser enabled device.

14. (Currently Amended) The network interface device recited in claim 1 wherein the plurality of microservers comprise ~~microserver comprises~~ an email alert microserver adapted to initiate an alert in response to receipt of an email message at an email account.

15. (Currently Amended) The network interface device recited in claim 1 wherein the plurality of microservers comprise ~~microserver comprises~~ an instant-messenger microserver adapted to provide instant-messaging functionality over the internal transport medium.

16. (Currently Amended) The network interface device recited in claim 1 wherein the plurality of microservers comprise ~~microserver comprises~~: a webserver microserver adapted to render a display of web-page information suitable for presentation with a web-browser enabled device; and an advertising microserver adapted to overlay an advertisement over the display of web-page information.

17. (Currently Amended) The network interface device recited in claim 1 wherein the plurality of microservers comprise ~~microserver comprises~~ a wireless microserver

adapted to provide an interface between wireless communications within the customer premises to the external transport medium.

18. (Currently Amended) The network interface device recited in claim 1 wherein the plurality of microservers comprise ~~microserver comprises~~ an RF power-level microserver adapted to monitor an RF power level of telecommunication information received at the first interface.

19. (Currently Amended) The network interface device recited in claim 1 wherein the plurality of microservers comprise ~~microserver comprises~~ a test-access microserver adapted to verify proper functioning of another component of the network interface device.

20. (Currently Amended) The network interface device recited in claim 1 further comprising a webserver microserver coupled with the plurality of microservers ~~microserver~~ and adapted to provide a customer-based graphical user interface for implementing software configuration changes of the microserver.

21. (Currently Amended) The network interface recited in claim 1 further comprising upgradeable firmware that supports the plurality of microservers ~~microserver~~.

22. (Currently Amended) A method for providing telecommunication information to a transport medium internal to a customer premises, the method comprising:

isolating the internal transport medium from a transport medium external to the customer premises such that operational changes to one of the internal and external transport media do not affect the other of the internal and external transport-media;

receiving the telecommunication information from the external transport medium;  
selectively processing the received telecommunication information with a microserver disposed external to the customer premises;

implementing a plurality of microservers ~~microprocessor~~ including software and/or hardware for implementing at least one of an authentication microserver, a file-transfer microserver, a dynamic host configuration protocol microserver, or webserver microserver to

function over the internal transport medium with the processed telecommunication information, wherein the plurality of microservers are plug-and-play combatable such that any of the plurality of microservers are configured to be able to be added and/or removed from the network interface device at any time and without configuration, and wherein the plurality of microservers are integrated in the network interface device; and

providing communications security by preventing a microserver from accessing communications information which is associated with another microserver.

23. (Currently Amended) The method recited in claim 22 further comprising transmitting the processed telecommunication information to an addressable application device disposed external to the customer premises, wherein implementing the plurality of microservers ~~microserver~~ functions comprises implementing an application over the internal transport medium with the addressable application device.

24. (Currently Amended) The method recited in claim 22 wherein selectively processing the received telecommunication information with the plurality of microservers ~~comprise microserver~~ ~~comprises~~ verifying that the microserver functions are authorized for the customer premises with an authentication microserver.

25. (Currently Amended) The method recited in claim 22 wherein selectively processing the received telecommunication information with the plurality of microservers ~~comprise microserver~~ ~~comprises~~ transferring an electronic file of information with a file-transfer microserver.

26. (Currently Amended) The method recited in claim 22 wherein selectively processing the received telecommunication information with the plurality of microservers ~~comprise microserver~~ ~~comprises~~ managing an internet-protocol address assignment to a device coupled with the internal transport medium with a dynamic host configuration protocol microserver.

27. (Currently Amended) The method recited in claim 22 wherein selectively processing the received telecommunication information with the plurality of microservers comprise ~~microserver~~ ~~comprises~~ receiving code and processing the code for use in implementing the microserver functions with a code-processing microserver.

28. (Currently Amended) The method recited in claim 27 wherein selectively processing the received telecommunication information with the plurality of microservers ~~microserver~~ further comprise ~~comprises~~ rendering a display of incoming web-page information suitable for presentation with a web-browser enabled device with a webserver microserver.

29. (Currently Amended) The method recited in claim 22 wherein selectively processing the received telecommunication information with the plurality of microservers comprise ~~microserver~~ ~~comprises~~ initiating an alert in response to receipt of an email message at an email account with an email alert microserver.

30. (Currently Amended) The method recited in claim 22 wherein selectively processing the received telecommunication information with the plurality of microservers comprise ~~microserver~~ ~~comprises~~ providing instant-messaging functionality over the internal transport medium with an instant-messenger microserver.

31. (Currently Amended) The method recited in claim 22 wherein selectively processing the received telecommunication information with the plurality of microservers comprise ~~microserver~~ ~~comprises~~: rendering a display of web-page information suitable for presentation with a web-browser device with a webserver microserver; and overlaying an advertisement over the display of web-page information with an advertising microserver.

32. (Currently Amended) The method recited in claim 22 wherein selectively processing the received telecommunication information with the plurality of microservers comprise ~~microserver~~ ~~comprises~~ providing an interface between wireless communications within the customer premises to the external transport medium with a wireless microserver.

33. (Currently Amended) The method recited in claim 22 wherein selectively processing the received telecommunication information with the plurality of microservers ~~comprise microserver~~ ~~comprises~~ monitoring an RF power level of the telecommunication information received from the external transport medium with an RF power-level microserver.

34. (Currently Amended) The method recited in claim 22 wherein selectively processing the received telecommunication information with the plurality of microservers ~~comprise microserver~~ ~~comprises~~ providing a customer-based graphical user interface for implementing configuration changes of software governing how the received telecommunication information is selectively processed.

35. (Currently Amended) A network interface device comprising:  
means for isolating a transport medium internal to a customer premises from a transport medium external to the customer premises such that operational changes to one of the internal and external transport media do not affect the other of the internal and external transport media;

means for receiving telecommunication information from the external transport medium; means for selectively processing the received telecommunication information, wherein such means for selectively processing is disposed external to the customer premises;

means for implementing a plurality of microservers ~~microprocessor~~ including software and/or hardware for implementing at least one of an authentication microserver, a file-transfer microserver, a dynamic host configuration protocol microserver, or webserver microserver to function over the internal transport medium with the processed telecommunication information, wherein the plurality of microservers are plug-and-play combatable such that any of the plurality of microservers are configured to be able to be added and/or removed from the network interface device at any time and without configuration, and wherein the plurality of microservers are integrated in the network interface device; and

means for providing communications security by preventing a microserver from accessing communications information which is associated with another microserver.

36. (Previously Presented ) The network interface device recited in claim 35 wherein the means for selectively processing the received telecommunication information comprises means for verifying that the microserver functions are authorized for the customer premises.

37. (Original) The network interface device recited in claim 35 wherein the means for selectively processing the received telecommunication information comprises means for transferring an electronic file of information to or from the network interface device.

38. (Original) The network interface device recited in claim 35 where in the means for selectively processing the received telecommunication information comprises means for managing an internet-protocol address assignment to a device coupled with the internal transport medium.

39. (Original) The network interface device recited in claim 35 wherein the means for selectively processing the received telecommunication information comprises means for receiving code and for processing the code for use by another component of the network interface device.

40. (Original) The network interface device recited in claim 35 wherein the means for selectively processing the received telecommunication information comprises means for rendering a display of incoming web-page information suitable for presentation with a web-browser enabled device.

41. (Original) The network interface device recited in claim 35 wherein the means for selectively processing the received telecommunication information comprises means for initiating an alert in response to receipt of an email message at an email account.

42. (Original) The network interface device recited in claim 35 wherein the means for selectively processing the received telecommunication information comprises means for providing instant-messaging functionality over the internal transport medium.



43. (Original) The network interface device recited in claim 35 wherein the means for selectively processing the received telecommunication information comprises: means for rendering a display of web-page information suitable for presentation with a web-browser device; and means for overlaying an advertisement over the display of web-page information.

44. (Original) The network interface device recited in claim 35 wherein the means for selectively processing the received telecommunication information comprises means for providing an interface between wireless communications within the customer premises to the external transport medium.

45. (Original) The network interface device recited in claim 35 wherein the means for selectively processing the received telecommunication information comprises means for monitoring an RF power level of the telecommunication information received from the external transport medium.

46. (Original) The network interface device recited in claim 35 wherein the means for selectively processing the received telecommunication information comprises means for providing a customer-based graphical user interface for implementing software changes of the means for selectively processing.